2F04051-PCT

• }

25

and

## CLAIMS

- 1. A voice authentication apparatus mounted on a communication terminal apparatus comprising:
- a storage section that stores a voice sample for 5 each of a plurality of communicating parties;
  - a specification section that specifies a communicating party of an incoming call;
- a verification section that reads the voice sample of the communicating party specified by said specification section from said storage section, verifies a received voice of the communicating party against the voice sample and outputs a verification result; and
  - a reporting section that reports the verification result outputted from said verification section.
- 2. A voice authentication system configured with a communication terminal apparatus and a remote terminal apparatus, said communication terminal apparatus comprising:
- a specification section that specifies a 20 communicating party of an incoming call;
  - a transmission section that transmits information about the communicating party specified by said specification section and a received voice of the communicating party, to said remote terminal apparatus;
  - a reporting section that receives and reports a verification result of the communicating party

2F04051-PCT

transmitted from said remote terminal apparatus, and said remote terminal apparatus comprising:

a storage section that stores a voice sample for each of a plurality of communicating parties;

a reception section that receives information about the communicating party transmitted from said communication terminal apparatus and a received voice of the communicating party;

a verification section that reads a corresponding voice sample of the communicating party from said storage section according to the information about the communicating party received by said reception section, verifies the received voice of the communicating party against the voice sample and outputs the verification result; and

- a transmission section that transmits the verification result outputted from said verification section to said communication terminal apparatus.
- 3. A voice authentication system configured with a 20 communication terminal apparatus and a remote terminal apparatus, said communication terminal apparatus comprising:
  - a storage section that stores a voice sample for each of a plurality of communicating parties;
- 25 a specification section that specifies a communicating party of an incoming call;
  - a transmission section that reads the voice sample

of the communicating party specified by said specification section from said storage section and transmits the voice sample together with a received voice of the communicating party, to said remote terminal apparatus; and

a reporting section that receives and reports a verification result of the communicating party transmitted from said remote terminal apparatus, and said remote terminal apparatus comprising:

a reception section that receives the voice sample of the communicating party transmitted from said communication terminal apparatus and the received voice of the communicating party;

a verification section that verifies the received voice of the communicating party against the voice sample of the communicating party received from said reception section and outputs a verification result; and

a transmission section that transmits the verification result outputted from said verification section to said communication terminal apparatus.

- 4. A voice authentication system configured with a communication terminal apparatus and a remote terminal apparatus, said communication terminal apparatus comprising:
- 25 a specification section that specifies a communicating party of an incoming call;

a transmission section that transmits information

about the communicating party to said remote terminal apparatus;

a reception section that receives a voice sample of the communicating party transmitted from said remote terminal apparatus .according to the transmitted information about the communicating party;

a verification section that verifies a received voice of the communicating party against the voice sample of the communicating party received by said reception section and outputs a verification result; and

a reporting section that reports the verification result outputted from said verification section, and said remote terminal apparatus comprising:

a storage section that stores a voice sample for 15 each of a plurality of communicating parties;

a reception section that receives information about the communicating party transmitted from said communication terminal apparatus; and

a transmission section that reads the voice sample

20 of the communicating party corresponding to the received information about the communicating party from said storage section and transmits the voice sample, to said communication terminal apparatus.

5. The voice authentication system according to claim
25 2, wherein:

said transmission section of said communication terminal apparatus encrypts the information to be

2F04051-PCT

15

transmitted to said remote terminal apparatus;

said reporting section decrypts the encrypted information received from said remote terminal apparatus;

said reception section of said remote terminal apparatus decrypts the encrypted information received from said remote terminal apparatus; and

said transmission section encrypts the information to be transmitted to said communication terminal apparatus.

- 10 6. The voice authentication system according to claim 2, wherein, in said remote terminal apparatus, when the voice sample of the communicating party does not match the received voice sample as the verification result outputted from said verification section, said
  - transmission section reports alarm information indicating that the communicating party is not the person himself/herself, to an external security organization.
    - 7. The voice authentication system according to claim 2, wherein, in said communication terminal apparatus,
- when the voice sample of the communicating party does not match the received voice sample as the verification result outputted from said verification section, said reception section starts recording a conversation with
  - the communicating party.
- 25 8. A voice authentication method for authenticating a voice of a communicating party of an incoming call at a communication terminal apparatus, the method

comprising:

10

20

25

a storing step of storing a voice sample for each of a plurality of communicating parties in a storage section;

5 a specifying step of specifying the communicating party of the incoming call;

a verifying step of reading the voice sample of the specified communicating party from said storage section, verifying a received voice of the communicating party against the voice sample and outputting a verification result; and

a reporting step of reporting the verification result.

9. A voice authentication method for authenticating
15 a voice of a communicating party of an incoming call at
a communication terminal apparatus in a communication
system configured with said communication terminal
apparatus and a remote terminal apparatus, said
communication terminal apparatus implementing:

a specifying step of specifying the communicating party of the incoming call;

a transmitting step of transmitting information about the specified communicating party and a received voice of the communicating party to said remote terminal apparatus; and

a reporting step of receiving and reporting a verification result of the communicating party

transmitted from said remote terminal apparatus, and said remote terminal apparatus implementing:

a storing step of storing a voice sample for each of a plurality of communicating parties in a storage section;

a receiving step of receiving information about the communicating party transmitted from said communication terminal apparatus and a received voice of the communicating party;

a verifying step of reading a corresponding voice sample of the communicating party from said storage section according to the received information about the communicating party, verifying the received voice of the communicating party against the voice sample and outputting a verification result; and

a transmitting step of transmitting the verification result to said communication terminal apparatus.

10. A voice authentication method for authenticating a voice of a communicating party of an incoming call at a communication terminal apparatus in a communication system configured with said communication terminal apparatus and a remote terminal apparatus, said communication terminal apparatus implementing:

a storing step of storing a voice sample for each of a plurality of communicating parties in a storage section;

a specifying step of specifying the communicating

25

party of the incoming call;

a transmitting step of reading the voice sample of the specified communicating party from said storage section and transmitting the voice sample together with a received voice of the communicating party to said remote terminal apparatus; and

a reporting step of receiving and reporting a verification result of the communicating party transmitted from said remote terminal apparatus, and said remote terminal apparatus implementing:

a receiving step of receiving a voice sample of the communicating party transmitted from said communication terminal apparatus and a received voice of the communicating party;

a verifying step of verifying the received voice of the communicating party against the received voice sample of the communicating party and outputting the verification result; and

a transmitting step of transmitting the verification 20 result to said communication terminal apparatus.

11. A voice authentication method for authenticating a voice of a communicating party of an incoming call at a communication terminal apparatus in a communication system configured with said communication terminal apparatus and a remote terminal apparatus, said communication terminal apparatus implementing:

a specifying step of specifying the communicating

party of the incoming call;

- a transmitting step of transmitting information about the communicating party to said remote terminal apparatus;
- a receiving step of receiving a voice sample of the communicating party transmitted from said remote terminal apparatus according to the transmitted information about the communicating party;
- a verifying step of verifying a received voice of the communicating party against the received voice sample of the communicating party and outputting the verification result; and
  - a reporting step of reporting the verification result, and said remote terminal apparatus implementing:
- a storing step of storing a voice sample for each of a plurality of communicating parties in a storage section;
- a receiving step of receiving information about the communicating party transmitted from said communication terminal apparatus; and
  - a transmitting step of reading the voice sample of the communicating party corresponding to the received information about the communicating party and transmitting the voice sample to said communication terminal apparatus.